

DIELECTRIC RESONATOR, DIELECTRIC FILTER,  
DIELECTRIC DUPLEXER, AND COMMUNICATION APPARATUS  
INCORPORATING THE SAME

ABSTRACT OF THE DISCLOSURE

The present invention provides a dielectric resonator, a dielectric filter, a dielectric duplexer capable of reducing leakage of electromagnetic waves and capable of being miniaturized, and a communication apparatus incorporating the same. In each of the dielectric resonator and filter, inside a dielectric block, there is formed a L-shaped inner-conductor-formed hole having a bend at some point of the hole in a manner extending from an outer surface of the dielectric block to a surface perpendicular to the outer surface. An inner conductor is formed on the inner surface of the inner-conductor-formed hole. On the substantially entire outer surfaces of the dielectric block, there is disposed an outer conductor, with one end of the inner-conductor-formed hole open-circuited and the remaining end of the hole short-circuited. Around the edge of the open-circuited end there is formed an outer coupling electrode. This structure enables formation of the dielectric resonator and the dielectric filter having the L-shaped inner-conductor-formed holes.